



SEQUENCE LISTING

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<120> IMPROVED METHOD OF PRODUCING AN ASPARTIC PROTEASE POLYPEPTIDE IN
A RECOMBINANT HOST ORGANISM

<130> P1031US00

<150> PA 2002 0092

<151> 2002-06-17

<160> 10

<170> PatentIn version 3.3

<210> 1

<211> 323

<212> PRT

<213> Bos taurus

<400> 1

Gly Glu Val Ala Ser Val Pro Leu Thr Asn Tyr Leu Asp Ser Gln Tyr
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Phe Gly Lys Ile Tyr Leu Gly Thr Pro Pro Gln Glu Phe Thr Val Leu
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Phe Asp Thr Gly Ser Ser Asp Phe Trp Val Pro Ser Ile Tyr Cys Lys
35 40 45

Ser Asn Ala Cys Lys Asn His Gln Arg Phe Asp Pro Arg Lys Ser Ser
50 55 60

Thr Phe Gln Asn Leu Gly Lys Pro Leu Ser Ile His Tyr Gly Thr Gly
65 70 75 80

Ser Met Gln Gly Ile Leu Gly Tyr Asp Thr Val Thr Val Ser Asn Ile
85 90 95

Val Asp Ile Gln Gln Thr Val Gly Leu Ser Thr Gln Glu Pro Gly Asp
100 105 110

Val Phe Thr Tyr Ala Glu Phe Asp Gly Ile Leu Gly Met Ala Tyr Pro
115 120 125

Ser Leu Ala Ser Glu Tyr Ser Ile Pro Val Phe Asp Asn Met Met Asn
 130 135 140

Arg His Leu Val Ala Gln Asp Leu Phe Ser Val Tyr Met Asp Arg Asn
 145 150 155 160

Gly Gln Glu Ser Met Leu Thr Leu Gly Ala Ile Asp Pro Ser Tyr Tyr
 165 170 175

Thr Gly Ser Leu His Trp Val Pro Val Thr Val Gln Gln Tyr Trp Gln
 180 185 190

Phe Thr Val Asp Ser Val Thr Ile Ser Gly Val Val Val Ala Cys Glu
 195 200 205

Gly Gly Cys Gln Ala Ile Leu Asp Thr Gly Thr Ser Lys Leu Val Gly
 210 215 220

Pro Ser Ser Asp Ile Leu Asn Ile Gln Gln Ala Ile Gly Ala Thr Gln
 225 230 235 240

Asn Gln Tyr Gly Glu Phe Asp Ile Asp Cys Asp Asn Leu Ser Tyr Met
 245 250 255

Pro Thr Val Val Phe Glu Ile Asn Gly Lys Met Tyr Pro Leu Thr Pro
 260 265 270

Ser Ala Tyr Thr Ser Gln Asp Gln Gly Phe Cys Thr Ser Gly Phe Gln
 275 280 285

Ser Glu Asn His Ser Gln Lys Trp Ile Leu Gly Asp Val Phe Ile Arg
 290 295 300

Glu Tyr Tyr Ser Val Phe Asp Arg Ala Asn Asn Leu Val Gly Leu Ala
 305 310 315 320

Lys Ala Ile

<210> 2
 <211> 1142
 <212> DNA

<213> artificial

<220>

<223> DNA fragment comprising a DNA fragment of 1138 bp designed to comprise a N-H-T glycosylation site and unique SalI and XhoI sites for cloning purposes (modB-XS).

<400> 2

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aagggcaagt ctctgcgtaa ggctctcaag gagcacggtc tgctcgagga tttcctgcag    120
aagcagcagt acggcatcag ctctaagtac agcggtttcg gcgaggtggc cagcgtgcct    180
ctcactaact acctggacag ccagtacttc ggtaagatct accttggcac tccccctcag    240
gagttcaccg ttctgttcga tactggttcc agcgacttct gggttccctc catctactgt    300
aagagcaacg cttgcaagaa ccaccagcgc ttcgatcctc gcaagtccag caccttccag    360
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caggagcctg gcgatgtctt cacttacgcc gagttcgatg gtatcctcgg catggcttac    540
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gtcgctcagg atctgttcag cgtgtacatg gaccgtaacg gtcaggagtc catgcttact    660
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atcgactgcg ataacctttc ttacatgcct actgtggttt tcgagatcaa cggtaagatg    960
tacccttcta ctcttctgc ttacacttcc caggatcagg gcttctgtac ctctggtttc   1020
cagtctgaga accacagcca gaagtggatc cttggcgatg tcttcatccg cgagtactac   1080
tccgtcttcg accgtgccaa caacctggtg ggtctcgcta aggccatctg atcctctaga   1140
gt                                                                    1142
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<210> 3

<211> 408

<212> DNA

<213> artificial

<220>

<223> an approximately 410 bp SalI-SphII I fragment made using synthetic oligonucleotides (SEQ ID XXX-1)

<400> 3
 cggctcgaccg ctacggtgac tgacacctgg cgtgccgaga tcaactcgcat cccctcttac 60
 aagggcaagt ctctgcgtaa ggctctcaag gagcacggtc tgctcgagga tttctgcag 120
 aagcagcagt acggcatcag ctctaagtac agcggtttcg gcgagggtggc cagcgtgcct 180
 ctactaact acctggacag ccagtacttc ggtaagatct accttggcac tccccctcag 240
 gagttcaccg ttctgttcga tactgggttc agcgacttct gggttccctc catctactgt 300
 aagagcaacg cttgcaagaa ccaccagcgc ttcgatcctc gcaagtccag caccttccag 360
 aaccttggca agcccctttc catccactac ggtactggca gcatgcag 408

<210> 4
 <211> 233
 <212> DNA
 <213> artificial

<220>
 <223> an approximately 220 bp SphI-BsrGI fragment made using synthetic oligonucleotides (SEQ ID XXX-2)

<400> 4
 gcagcatgca gggatcctt ggctacgaca ccgttaccgt gtccaacatc gtcgatattc 60
 agcagaccgt gggctctgagc acccaggagc ctggcgatgt cttcacttac gccgagttcg 120
 atggatcctt cggcatggct taccctccc tggcctctga gtactctatc cctgtgttcg 180
 acaacatgat gaaccgccac ctctctgctc aggatctgtt cagcgtgtac atg 233

<210> 5
 <211> 200
 <212> DNA
 <213> Artificial

<220>
 <223> an approximately 190 bp BsrGI-KpnI fragment made using synthetic oligonucleotides (SEQ ID XXX-3)

<400> 5
 gcgtgtacat ggaccgtaac ggtcaggagt ccatgcttac tctgggcgcc atcgatccct 60
 cttactacac cggttccctc cactgggttc ctgtgaccgt ccagcagtac tggcagttca 120
 ccgtggacag cgtcactatc tccggcgtgg ttgtggcttg cgaggggtggc tgtcaggcca 180
 tccttgatac tggtaccagc 200

<210> 6
 <211> 334

<212> DNA
<213> artificial

<220>
<223> an approximately 320 bp KpnI-XbaI fragment made using synthetic oligonucleotides (SEQ ID XXX-4)

<400> 6
ctggtaccag caagctcgtc ggcccctcca gcgacatcct gaacatccag caggctatcg 60
gtgccacca gaaccagtac ggcgagttcg atatcgactg cgataacctt tcttacatgc 120
ctactgtggt ttctcgagatc aacggtaaga tgtaccccct tactccttct gcttacactt 180
cccaggatca gggcttctgt acctctgggt tccagtctga gaaccacagc cagaagtgga 240
tccttggcga tgtcttcacg cgcgagtact actccgtctt cgaccgtgcc aacaacctgg 300
tgggtctcgc taaggccatc tgatcctcta gagt 334

<210> 7
<211> 334
<212> DNA
<213> artificial

<220>
<223> a modified KpnI-XbaI fragment designed for construction of the modBM gene (SEQ ID XXX-5).

<400> 7
ctggtaccag caagctcgtc ggcccctcca gcgacatcct gaacatccag caggctatcg 60
gtgccacca gaaccagtac ggcgagttcg atatcgactg cgataacctt tcttacatgc 120
ctactgtggt ttctcgagatc aacggtaaga tgtaccccct tactccttct gcttacactt 180
cccaggatca gggcttctgt acctctgggt tccagtctga gaaccacacc cagaagtgga 240
tccttggcga tgtcttcacg cgcgagtact actccgtctt cgaccgtgcc aacaacctgg 300
tgggtctcgc taaggccatc tgatcctcta gagt 334

<210> 8
<211> 66
<212> DNA
<213> artificial

<220>
<223> synthetic polylinker (SalI-SphI-BsrGI-KpnI-XbaI) (SEQ ID XXX-6)

<400> 8
ggccaggcgc gccttccatg gaagaatgcg gccgctaaac catcgatggc tcgagttggc 60
gcgcca 66

<210> 9
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Primer

<400> 9
catgtacacg ctgaacagat cctgagc

27

<210> 10
<211> 74
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Primer

<400> 10
cgtcgaccgc tacggtgact gacacctggc gtaccgacaa ctccaccgag atcactcgca 60
tccccctcta caag 74